# Hillsdale Lake

## Legend

- Flood Control Pool
- Multipurpose Pool
- Potential Public Use Areas (See Recreation Text)
- Paved or Hard Surface Road
- Gravel Road
- Graded Dirt Road
- Turn Around
- Sanitary Facilities

## Project Data

**Dam**

| | |
|---|---|
| Type | Rolled earthfill |
| Length, ft. | 11,600 |
| Height, ft. (maximum above valley flood plain) | 75 |
| Width, ft. (crown) | 30 |
| Width, ft. (base) | 1,075 |
| Volume of excavation, cu. yd. | 1,242,000 |
| Volume of earthfill, cu. yd. | 6,964,000 |
| Volume of concrete, cu. yd. | 12,200 |
| Amount of steel, lbs. | 1,396,000 |

**Spillway**

| | |
|---|---|
| Type | Uncontrolled chute-type |
| Crest width, ft. | 50 |
| Capacity (spillway design flood) cu. ft. per sec. | 4,750 |

**Outlet Works**

| | |
|---|---|
| Type | Single oblong conduit 11.67 ft. × 15.92 ft. |
| Capacity | Spillway crest cu. ft. per sec. 7,400 |
| Length of conduit, ft. | 721 |

**Gates**

| | |
|---|---|
| Control | 2 fabricated steel 16 ft. × 12 ft. slide hydraulically operated |

**Lake**

| | |
|---|---|
| Elevation, feet above mean sea level: | |
| Flood control pool | 931.0 |
| Multipurpose pool | 917.0 |
| Storage, acre-feet* | |
| Flood control pool | 81,000 |
| Multipurpose pool | 68,000 |
| Sediment pool | 11,000 |
| Surface area, acres: | |
| Flood control pool | 7,410 |
| Multipurpose pool | 4,580 |
| Shoreline (multipurpose) mi. | 51 |

*One acre-foot equals one acre of water one foot deep or 325,851 gallons.

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# Hillsdale Lake

## Kansas

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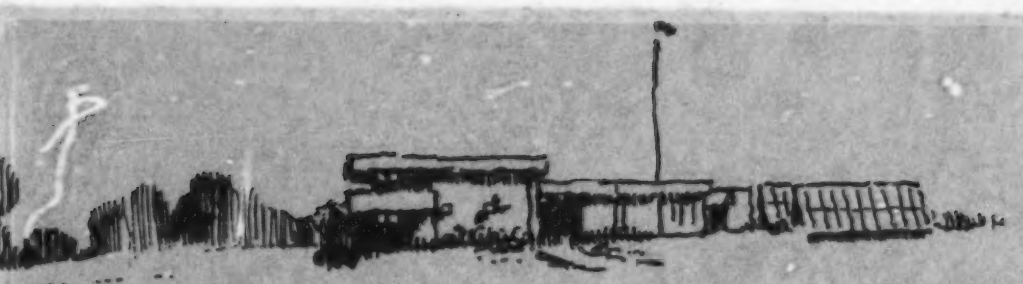


## Welcome

*The Kansas City District of the Corps of Engineers welcomes you to Hillsdale Lake. Your observance of the rules and regulations will make your visit and the visits of others more enjoyable. You may obtain a copy of the Code of Federal Regulations, Title 36, Chapter III, at the Visitor Center, or by asking a park ranger for a copy. Please remember, only a safe visit is an enjoyable one. Whatever your activity - KEEP SAFETY IN MIND.*

## The Visitor Center

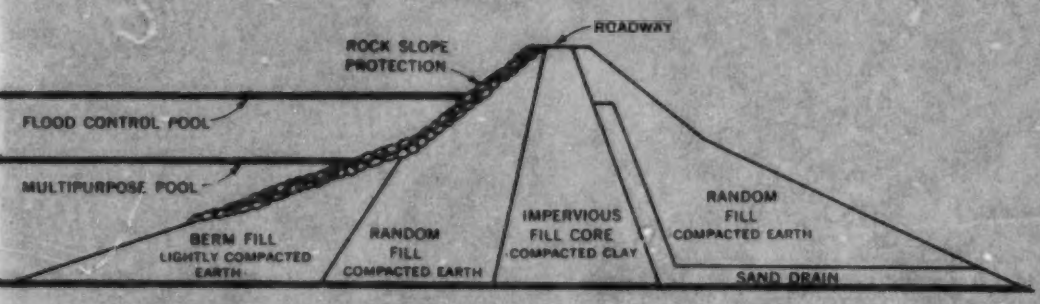
A short tour of the Visitor Center, located at the east end of the dam, will make your visit more enjoyable. In addition to maps and literature, many interesting displays are provided to explain the lake's history, recreational opportunities and natural resources. Corps rangers are present to answer your questions about the lake.

When you arrive at the Visitor Center, you will notice the glass surfaced structures adjacent to the building. These are solar collectors used to heat the building. The Visitor Center is a small part of a nationwide effort to design public buildings that reduce consumption of non-renewable energy resources by taking advantage of alternatives such as solar energy.

## Project Development

Hillsdale Lake was authorized by Congress in 1954 as part of a comprehensive flood control plan for the Osage and Missouri River basins. Support for the project by local citizens and the Hillsdale Lake Development Association resulted in Congress appropriating funds for construction in 1973. Actual construction began in 1976. The project was completed in 1982 at a cost of $61 million.

## The Dam at Work




In building earth dams, designers generally use materials that are found close at hand. The core is made from clay which, when compacted with heavy rollers, becomes practically watertight. On the downstream side of the watertight core is a sand drain which carries away the small quantity of water that passes through the core. Riprap, which consists of medium to large pieces of loose rock, is placed on the upstream slope of the dam to prevent erosion by wind or waves.

The control tower is equipped with two gates that will control the flow of water through the conduit into the stilling basin. There the force of the water is reduced before it flows downstream.

On the west end of the dam, the spillway acts as a safety valve to prevent overtopping of the dam by floodwaters.

# History

When early French explorers first entered Kansas around the beginning of the 18th century, the Kansa Indians dominated the northeastern section of what is now Kansas, and the Osage Indians controlled the western part of Missouri. Both tribes probably hunted in the Bull Creek region, but there are no historical references to Bull Creek until the 19th century. With development of the Santa Fe Trail in 1812, traffic to the area increased dramatically. Two branches of the trail crossed through the headwaters of Bull Creek about two miles north of the present Hillsdale Lake. In this same period, a large number of Indian tribes were transferred to reservations in eastern Kansas. The existence of the reservations soon attracted settlers eager to trade with the Indians. The relationship between the settlers and the Indians changed dramatically at about the time Kansas became a territory. Squatters, speculators and the railroads competed for the reservation lands, forcing the Indians to move to the Oklahoma Indian Territory in 1868.

About the same time as the Indians were being forced out, guerrilla warfare began between the abolitionists and the pro-slavery forces. John Brown arrived in Osawatomie in 1855 to head the abolitionists in the fight against slavery. He earned lasting fame in 1857 for his attack on Harpers' Ferry, West Virginia. Another historic figure, William Quantrill, came to Miami County in 1857 to teach school. During the Civil War, Quantrill frequented the area and camped near Bull Creek following his historic raid on Lawrence, Kansas. The Civil War brought many such conflicts to the Eastern part of the state and consequently became known as "Bleeding Kansas."

Located in the project area were two historic towns, Tontzville and Maryville. Both towns were lively during the 1860's and 1870's, but when the railroad came to Hillsdale both towns were abandoned.

# Plant and Animal Life

Located in the transition zone between the prairie lands of the west and the mixed hardwood forests of the east, the project area has a great diversity of plant communities that support an abundance of wildlife. In centuries past, this zone has changed constantly as the climate changed, favoring either grassland or forest. Today, the prairie and forest are in constant competition in areas not being utilized for agriculture. These different habitats provide homes for many kinds of wildlife including white-tailed deer, raccoon, beaver, squirrel, rabbit, coyote and bobcat.

Birdwatchers will delight in the many species of birds at the lake. The changing seasons bring the promise of migrating waterfowl and shorebirds that use Hillsdale Lake as a rest stop.

## Benefits

Controlling a drainage area of more than 144 square miles, Hillsdale Lake provides flood protection along Big Bull Creek downstream from the dam. As part of the Osage River basin system of lakes, Hillsdale also contributes to flood protection on the Marais des Cygnes, Osage and Missouri rivers.

As a water supply source, the lake can provide 17.3 million gallons of water each day for municipal and industrial needs of surrounding communities.

In addition to providing water supply and flood protection, Hillsdale Lake will improve downstream water quality, and provide recreation and fish and wildlife benefits.

## Recreation

Hillsdale provides the recreationist with an opportunity to enjoy water-based recreation, along with a unique experience of nature. In 1989, the Kansas Department of Wildlife and Parks assumed management responsibility for the development of recreation and wildlife lands at Hillsdale.

Facilities are currently being planned, designed, and constructed to meet the needs and wants of the recreationist. Areas are being maintained and improved as park development continues. Maps and information concerning the current facilities are available at the Visitor Center near the dam.

Hillsdale provides hunters, fishermen, picnickers, naturalists, photographers, birdwatchers, sightseers, and others with a unique opportunity to discover nature. Hunters will find a variety of game at Hillsdale. Others will enjoy the solitude of the timbered areas or the hooking of that "once in a lifetime" largemouth bass.

The multipurpose pool (normal lake level) offers sportsmen 4,580 acres of water. To enhance the fisheries, over 70% of the standing timber was left in the lake basin to provide fish habitat. Game fish include largemouth bass, crappie, catfish, walleye, and bluegill. While boating, be especially watchful for rocks, logs, snags, shallow areas, or other objects that lie under the surface of the water, as well as for other boats. Pool level fluctuations can add new submerged hazards to previously safe water areas. If you notice floating debris or any other object in the water, slow down and be extra alert.

Visitors should be aware that both Federal and State rules and regulations apply on the public lands and waters at Hillsdale Lake.

## Location of Hillsdale Lake

### Distance from Dam Site

To Hillsdale - 2½ miles
To Spring Hill - 8 miles
To Paola - 9 miles
To Ottawa - 25 miles
To Lawrence - 37 miles
To Kansas City - 40 miles
To Topeka - 57 miles
To Wichita - 167 miles

**US Army Corps of Engineers**
Kansas City District

For additional information about the project, write to: Project Manager, Hillsdale Lake Office, Route 3, Box 205, Paola, Kansas 66071; or call (913) 783-4366.